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4 UNITED STATES DISTRICT COURT

5 NORTHERN DISTRICT OF CALIFORNIA

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7 IRONWORKS PATENTS LLC,   Case No. 17-cv-01958-HSG

8   Plaintiff,   **CLAIM CONSTRUCTION ORDER**

9   v.   Re: Dkt. No. 145

10 SAMSUNG ELECTRONICS CO., LTD., et al.,

11

12   Defendants.

13   On May 26, 2017, MobileMedia Ideas LLC ("MMI") filed this patent infringement action

14 against Defendants Samsung Electronics Co., Ltd., and Samsung Electronics America, Inc.

15 (collectively, "Samsung"). Dkt. No. 1 ("Compl.") On March 27, 2017, MMI assigned the patents-

16 in-suit to Ironworks Patents LLC ("Ironworks"). Dkt. No. 66-2. And on July 6, 2017, this Court

17 permitted Ironworks to replace MMI as the Plaintiff. Dkt. No. 92. The parties now seek

18 construction of eight terms found in two patents: Patent Nos. 6,427,078 ("the '078 Patent"), and

19 5,915,239 ("the '239 Patent") (collectively, "the Asserted Patents").[1] This order follows claim

20 construction briefing, a technology tutorial, and a claim construction hearing.

21 **I.   LEGAL STANDARD**

22   Claim construction is a question of law to be determined by the Court. *Markman v.*

23 *Westview Instruments, Inc.*, 517 U.S. 370, 384 (1996). "The purpose of claim construction is to

24 determine the meaning and scope of the patent claims asserted to be infringed." *O2 Micro Int'l*

25 *Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008) (quotation omitted).

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[1] Despite initially proposing constructions of the term "at least one memory unit for storing said image information," the parties now agree that the Court need not construe that term. *See* Dkt.

28 No. 124-1, at 3 (proposing construction); Dkt. No. 157 at 6:1–4 (noting that the parties "reached an agreement on that, and it doesn't need to be construed").

1   Generally, claim terms should be "given their ordinary and customary meaning"—in other

2   words, "the meaning that the term[s] would have to a person of ordinary skill in the art in question

3   at the time of the invention." *Phillips v. AWH Corp.,* 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en

4   banc) (quotation omitted). There are only two circumstances where a claim is not entitled to its

5   plain and ordinary meaning: "1) when a patentee sets out a definition and acts as his own

6   lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the

7   specification or during prosecution." *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362,

8   1365 (Fed. Cir. 2012).

9   When construing claim terms, the Federal Circuit emphasizes the importance of intrinsic

10   evidence such as the language of the claims themselves, the specification, and the prosecution

11   history. *Phillips*, 415 F.3d at 1312–17. The claim language can "provide substantial guidance as

12   to the meaning of particular claim terms," both through the context in which the claim terms are

13   used and by considering other claims in the same patent. *Id.* at 1314. The specification is likewise

14   a crucial source of information. *Id.* at 1315–17. Although it is improper to read limitations from

15   the specification into the claims, the specification is "the single best guide to the meaning of a

16   disputed term." *Id.* at 1315 (noting that "the specification is always highly relevant to the claim

17   construction analysis," and that "[u]sually, it is dispositive" (quotation omitted)); *see also Merck*

18   *& Co. v. Teva Pharm. USA, Inc.,* 347 F.3d 1367, 1371 (Fed. Cir. 2003) (explaining that "claims

19   must be construed so as to be consistent with the specification").

20   Despite the importance of intrinsic evidence, courts may also consider extrinsic evidence—

21   technical dictionaries, learned treatises, expert and inventor testimony, and the like—to help

22   construe the claims. *Phillips*, 415 F.3d at 1317–18. For example, dictionaries may reveal what

23   the ordinary and customary meaning of a term would have been to a person of ordinary skill in the

24   art at the time of the invention. *Frans Nooren Afdichtingssystemen B.V. v. Stopaq Amcorr*

25   *Inc.,* 744 F.3d 715, 722 (Fed. Cir. 2014) ("Terms generally carry their ordinary and customary

26   meaning in the relevant field at the relevant time, as shown by reliable sources such as

27   dictionaries, but they always must be understood in the context of the whole document—in

28   particular, the specification (along with the prosecution history, if pertinent)."). Expert testimony

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can also help "to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field." *Phillips*, 415 F.3d at 1318. Extrinsic evidence is, however, "less significant than the intrinsic record in determining the legally operative meaning of claim language." *Id.* at 1317 (quotation omitted).

II.   AGREED TERMS

The parties agree on the construction of eleven terms. Dk. No. 124 ("JCCS") at 2–3. In light of the parties' agreement, the Court adopts the construction of these terms as set forth in the following table:

Patent	Claim Term	Agreed Construction
'078 Patent	"means for transmitting image information processed by said processing unit to another location using a radio frequency channel" [claim 1]	<u>Function</u>: transmitting image information processed by said processing unit to another location using a radio frequency channel <u>Structure</u>: cellular mobile phone unit and equivalents thereof
'078 Patent	"means for transmitting an image processed by said processing means to another location using a radio frequency channel" [claim 36]	<u>Function</u>: transmitting image information processed by said processing unit to another location using a radio frequency channel <u>Structure</u>: cellular mobile phone unit and equivalents thereof
'078 Patent	"means for transmitting image information comprises a cellular mobile phone unit" [claim 2]	<u>Function</u>: transmitting image information <u>Structure</u>: cellular mobile phone unit and equivalents thereof
'078 Patent	"means . . . for transmitting image information processed by said microprocessor to another location using a radio frequency channel" [claim 73]	<u>Function</u>: transmitting image information processed by said microprocessor to another location using a radio frequency channel <u>Structure</u>: cellular mobile phone unit and equivalents thereof

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'078 Patent	"means for transmitting image information transmits the image information processed by said microprocessor to another location by transmitting an electronic mail message" [claim 77]	Function: transmitting image information processed by said microprocessor to another location by transmitting an electronic mail message Structure: cellular mobile phone unit and equivalents thereof
'078 Patent	"means for performing at least one of transmitting an electronic mail message, paging, and connecting to an on-line information service" [claim 42]	Function: performing at least one of transmitting an electronic mail message, paging, and connecting to an on-line information service Structure: cellular mobile phone unit and equivalents thereof
'078 Patent	"means . . . for displaying at least a portion of an image recorded by said camera unit" [claim 38]	Function: displaying at least a portion of an image recorded by said camera unit Structure: a display and equivalents thereof
'078 Patent	"means for processing and for storing at least a portion of the image information obtained by the camera unit for later recall and processing" [claim 73]	Function: processing and storing at least a portion of said image information obtained by said camera unit for later recall and processing Structure: microprocessor (23) and memory (24) within the camera unit
'078 Patent	"user interface" [claims 1 and 73]	Plain and ordinary meaning
'239 Patent	"sub-identifier" [claims 4 and 10]	A word within an identifier
'239 Patent	"identifier" [claims 4 and 10]	An entry, such as a name, associated with each phone number

III. DISPUTED TERMS

A. "camera unit" ('078 Patent)

Ironworks's Construction	Samsung's Construction
Plain and ordinary meaning, no construction necessary. If construed: "a data collection apparatus for obtaining image information"	"camera arrangement comprising a camera, optics, microprocessor and memory, battery, and interface to external systems constituting an individual component of a whole personal communication device or whole portable mobile cellular phone"

The Court adopts Samsung's construction.

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The term "camera unit" appears in independent claims 1, 36, and 73, and dependent claims 18, 38, and 46 of the '078 Patent. JCCS, App. A at 1. Ironworks argues that "each of [the] three independent claims defines . . . 'camera unit' differently," such that no one claim is representative. *See* Op. Br. at 9–11 (discussing *MobileMedia Ideas LLC v. Apple Inc.* ("*MMI*"), 780 F.3d 1159 (Fed. Cir. 2015)). The following table presents the term's usage in each independent claim:

Claim 1[2]	Claim 36	Claim 73
1. A [device] *portable cellular mobile phone* for personal communication, data collection and data processing, which is a small-sized, portable and hand-held work station including a housing and comprising a data processing unit *comprising a microprocessor*, a display, a user interface, a number of peripheral device interfaces, at least one memory unit; a power source, and application software, wherein the device also comprises: a **camera unit** for obtaining and outputting image information comprising: a camera for receiving image information; optics connected to said camera for passing said image information to the camera; *means for processing and for storing at least a*	36. A portable notebook computer having a housing, comprising: a **camera unit** for recording an image of a selected object, and having at least one memory unit for storing an image recorded by said camera unit; means, coupled to said **camera unit,** for processing an image recorded by said camera unit, and means for transmitting an image processed by said processing means to another location using a radio frequency channel; wherein at least a portion of said **camera unit** is integrated in one of said housing of said notebook computer and a circuit card.	73. A portable cellular mobile phone comprising: a built in **camera unit** for obtaining image information; a user interface for enabling a user to input signals to operate the **camera unit**; a display for presenting image information obtained by the **camera unit**; a microprocessor adapted to control the operations of the **camera unit** in response to input signals from the user interface, and to process image information received by the **camera unit**; and means, coupled to said microprocessor, for transmitting image information processed by said microprocessor to another location using a radio frequency channel; and wherein the **camera**

[2] The language of Claim 1 of the '078 Patent was modified in 2012, following reexamination by the Patent and Trademark Office. *See* Dkt. No. 145-1 at 14–15. The claim as stated here reflects deletions (in brackets) and additions (in italics) as compared to the original claim language. No other independent claims at issue for this term were modified upon reexamination. Future citations to the language of claim 1 are to the '078 Patent as amended in 2012 ("Claim 1, 2012 '078 Patent") unless otherwise noted.

portion of said image information obtained by said camera unit for later recall and processing; at least one memory unit for storing said image information; and an output coupled to said data processing unit for outputting image information from said memory unit to the processing unit; and wherein at least a portion of said camera unit is located within said housing, and said data processing unit processes image information output by said **camera unit**, *wherein said display presents image information obtained by said camera unit*, and wherein said device further comprises means for transmitting image information processed by said processing unit to another location using a radio frequency channel.		**unit** comprises: optics for obtaining image information; an image sensor for obtaining image information; and means for processing and for storing at least a portion of the image information obtained by the camera unit for later recall and processing.

Despite Ironworks's assertion that each independent claim "defines . . . 'camera unit'
differently," Ironworks simultaneously argues that the Court need not construe the term because it
is unambiguous. Op. Br. at 10–11. Instead, Ironworks asks the Court to give the term its "plain
and ordinary meaning." *Id.* Ironworks also contends that "camera unit," if construed, means "a
data collection apparatus for obtaining image information." *Id.* The phrase "data collection
apparatus" does not appear in any of the claims. Also, Ironworks's opening brief offered no
intrinsic or extrinsic evidence to support that construction. Ironworks's reply, however, notes that
a Delaware district court adopted its alternative construction in *MobileMedia Ideas, LLC v. Apple*

Inc., 907 F. Supp. 2d 570, 601 (D. Del. 2012), *vacated in part*, 780 F.3d 1159 (Fed. Cir. 2015). *See* Reply Br. at 1. Ironworks adds that neither party to that case appealed the court's construction of "camera unit." *Id.*

Ironworks further contends that Samsung's proposed construction improperly (1) imports additional limitations absent from some claims, and (2) renders other claims redundant by setting out the same elements already recited in those claims. Op. Br. at 12. To that end, Ironworks asserts that both claim 1 and claim 73 define *for that claim only* what a camera unit "comprises," with the latter stating fewer requirements than the former. *Id.* Ironworks contends that accepting one interpretation of camera unit for all claims would thus create confusion. *Id.*

The Court disagrees with Ironworks's arguments and adopts Samsung's construction. To begin, this Court must construe the term "camera unit," because the term is ambiguous. Ironworks's own position invites ambiguity: if the Court accepts that independent claims use "camera unit" differently, then the term's meaning necessarily varies. Moreover, while Ironworks separately contends that construction is unnecessary because the Court can adopt the term's plain and ordinary meaning, Ironworks provides no such plain and ordinary meaning. *See O2 Micro Int'l Ltd.*, 521 F.3d at 1361 ("A determination that a claim term 'needs no construction' or has the 'plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute.") Further, Ironworks cites no expert testimony or any other external reference to describe how a skilled artisan would understand the term "camera unit" at the time of the invention. *See Phillips*, 415 F.3d at 1312–13.

Apart from the general flaws in Ironworks's arguments, the Federal Circuit has addressed the camera unit term at issue here, and its analysis is instructive.[3] *See MMI*, 780 F.3d 1159 (discussing the '078 Patent). That case highlighted that "[t]he specification explains that the structure of the camera unit 'conforms to the block diagram shown in Fig[ure] 5' of the '078

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[3] Although the Federal Circuit considered the meaning of the term "means for processing and for storing" image information as it appears in claim 73, Ironworks has not asserted that this function differs by claim. *See MMI*, 780 F.3d at 1167.

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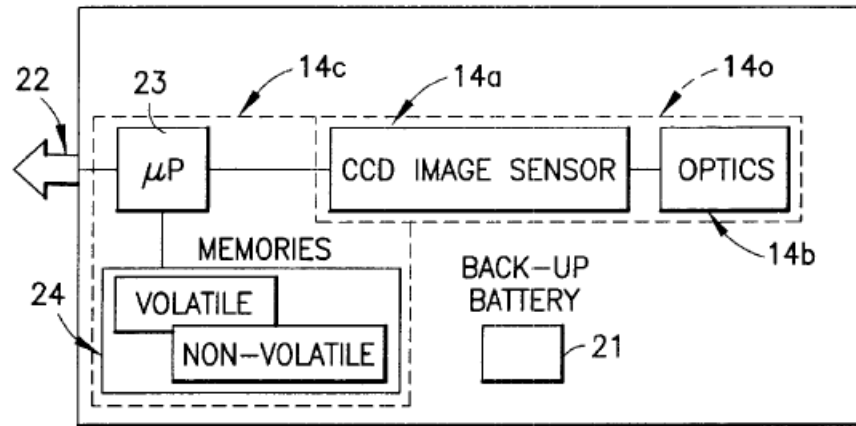1 patent." *Id.* at 1169 (citing '078 Patent, 4:23–25). Figure 5 appears below:

FIG.5

13 And as the Federal Circuit noted: "Figure 5 illustrates that the camera unit includes a

14 'camera 14*a* and optics 15*b*, image processing unit 14*c*, [and] battery 21.' The camera unit's

15 image processing unit is a 'microprocessor 23' and 'a number of memory units 24.'" *Id.* (citing

16 '078 Patent, 4:23–31, 4:37–41). This finding tracks Samsung's proposed construction.[4]

17 The Court further disagrees with Ironworks's characterization of Samsung's construction

18 as either overly limiting or redundant. In arguing that each claim defines "camera unit" for the

19 purpose of only that claim, Ironworks contrasts the "comprising" language of claims 1 and 73.

20 *See* Op. Br. at 12. Ironworks points out that the camera unit in claim 1 comprises: "a ***camera***,

21 optics, means for processing and for storing, a memory unit, and an ***output***." *Id.*; *see also* '078

22 Patent, 7:51–60. Ironworks describes claim 73, in contrast, as comprising "optics, an ***image***

23 ***sensor***, and a means for processing and for storing." Op. Br. at 12; *see also* '078 Patent, 16:13-18.

24 But claim 73's language makes clear that "image sensor" is effectively equivalent to the word

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26 [4] The Court acknowledges that the Delaware district court adopted Ironworks's "if construed"
27 proposal. *See MobileMedia Ideas, LLC.*, 907 F. Supp. 2d at 601. But the Court respectfully
declines to endorse that construction, in part because the only line of the specification relied upon
28 by the Delaware court describes the function of the camera and not what it comprises. *See id.*
(discussing '078 Patent, 3:66).

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1 "camera" as used in claim 1. *Compare* Claim 1, 2012 '078 Patent, 1:46 (describing "***a camera*** for

2 receiving image information"), *with* Claim 73, '078 Patent, 16:16 (describing "***an image sensor***

3 for obtaining image information"). If those terms were not substantively equivalent, then claim

4 73's "camera unit" would disclose no "camera" at all, which is inconsistent with the plain

5 language of the claim. The only other distinction between these claims' "camera unit . . .

6 comprising" language is claim 1's recitation of an "output." "Output," however, does not appear

7 in Samsung's construction.

8   Although Samsung's construction includes specific elements—e.g., "battery"—not present

9 in independent claims 1, 36, and 73, the specification nonetheless supports Samsung's

10 construction:

> In principle, the structure of both camera card 15 and camera unit 14 conforms to the block diagram shown in FIG. 5. By example, camera card 15 consists of camera arrangement 140 which comprises camera 14*a* and optics 14*b* image processing unit 14*c*, battery 21 and interface 22 to external systems . . . . Image processing unit 14*c* comprises microprocessor 23 and a number of memory units 24.

15 *See* '078 Patent, 4:23–31. Ironworks argues that this discussion refers to Figure 2, which provides

16 "an example of the notebook computer application of the invention." Op. Br. at 12–13. The Court

17 disagrees. Although the text above uses the word "example," it also expressly refers to Figure 5,

18 which "shows a block diagram of the camera unit." '078 Patent, 2:11. The specification does not

19 limit Figure 5 to one embodiment. Figure 5, in turn, contains the elements set forth in the above-

20 quoted text. And as noted above, the Federal Circuit relied on this text and Figure 5 to identify the

21 camera unit's structure. *See MMI*, 780 F.3d at 1168–71 ("The specification explains that the

22 structure of the camera unit 'conforms to the block diagram shown in Fig[ure] 5' . . . ."); Resp. Br.

23 at 8.

24   Ironworks urges the Court not to limit the claims based on the specification. Op. Br. 13–

25 14. But this Court cannot ignore that the specification is "the single best guide to the meaning of a

26 disputed term." *See Phillips*, 415 F.3d at 315; *Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d

27 1322, 1331 (Fed. Cir. 2009) (holding that the district court properly construed a claim to include

28 the element of "wires" where "every embodiment described in the specification and shown in the

drawings includes wires").

"means for processing and for storing at least a portion of said image information obtained by said camera unit for later recall and processing" ('078 Patent)

Ironworks's Construction	Samsung's Construction
Plain and ordinary meaning, no construction necessary.	This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6.
If construed: Function: processing and for storing at least a portion of said image information obtained by said camera unit for later recall and processing Structure: microprocessor 23 and equivalents	Function: processing and storing at least a portion of said image information obtained by said camera unit for later recall and processing Structure: microprocessor (23) and memory (24) within the camera unit

The Court adopts Samsung's construction for the function, but adopts the following construction for the structure: "microprocessor (23) and memory *unit* (24) within the camera unit."

The term "means for processing and for storing . . . image information . . ." appears in independent claim 1 of the '078 Patent. *See* JCCS, App. A at 1–2. Ironworks again disputes whether the term as used in that claim is representative of how the term is used in the claim language. Op. Br. at 14–16. The term also appears in independent claim 73, but the parties do not ask the Court to construe the term as set forth in that claim. For purposes of the analysis that follows, however, the following table sets forth how independent claims 1 and 73 use the term:

Claim 1	Claim 73

1. A portable cellular mobile phone for personal communication, data collection and data processing, which is a small-sized, portable and hand-held work station including a housing and comprising a data processing unit comprising
   a microprocessor,
   a display,
   a user interface,
   a number of peripheral device interfaces,
	73. A portable cellular mobile phone comprising:
	  a built in camera unit for obtaining image information;
	   a user interface for enabling a user to input signals to operate the camera unit;
	   a display for presenting image information obtained by the camera unit;

at least one memory unit;	a microprocessor adapted to control the operations of the camera unit in response to input signals from the user interface, and to process image information received by the camera unit; and
a power source, and	
application software,	
wherein the device also comprises:	
a camera unit for obtaining and outputting image information comprising:	
a camera for receiving image information;	
optics connected to said camera for passing said image information to the camera;	means, coupled to said microprocessor, for transmitting image information processed by said microprocessor to another location using a radio frequency channel;
means for processing and for storing at least a portion of said image information obtained by said camera unit for later recall and processing;	
	and wherein the camera unit comprises:
at least one memory unit for storing said image information; and	optics for obtaining image information;
an output coupled to said data processing unit for outputting image information from said memory unit to the processing unit; and	an image sensor for obtaining image information; and **means for processing and for storing at least a portion of the image information obtained by the camera unit for later recall and processing**.
wherein at least a portion of said camera unit is located within said housing, and said data processing unit processes image information output by said camera unit,	
wherein said display presents image information obtained by said camera unit, and	
wherein said device further comprises means for transmitting image information processed by said processing unit to another location using a radio frequency.	

Samsung accurately characterizes this term as a means-plus-function term subject to 35 U.S.C. § 112 ("Section 112"). A claim invokes Section 112 if the claim limitation is drafted in the means-plus-function format. *See Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1097 (Fed. Cir. 2014) ("The use of the term 'means' triggers a rebuttable presumption that § 112, ¶ 6 governs the construction of the claim term."). Here, the term expressly includes the word "means," and Ironworks does not rebut that presumption.

Given that Section 112 applies, the Court's analysis is two-fold: the Court (1) identifies the claimed function; and then (2) determines what structure, if any, is disclosed in the specification

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1   that corresponds to these functions. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1351–52

2   (Fed. Cir. 2015). Structure disclosed in the specification must be "corresponding structure,"

3   which is satisfied "if the intrinsic evidence clearly links or associates that structure to the function

4   recited in the claim." *Id.* at 1352. Even where structure is corresponding, it must also constitute

5   "adequate corresponding structure to achieve the claimed function." *Id.* (quotation omitted).

6   The parties here agree that the claimed function is "processing and storing at least a portion

7   of said image information obtained by said camera unit for later recall and processing." The

8   parties dispute, however, what structure corresponds to the claimed function. Ironworks's

9   proposed structure is "microprocessor 23 and equivalents." *See* Op. Br. at 14. Samsung's

10 proposed structure is "microprocessor (23) and memory (24) within the camera unit." *See* Resp.

11 Br. at 4–5.

12   As Samsung notes, the Federal Circuit has already construed this term, albeit in the context

13 of claim 73:

14   The specification thus clearly links two structures to the claimed
           means for performing the function of processing and storing image
15   information obtained by the camera for later recall: "microprocessor
           23" and "memory unit 24," the processor and memory units within
16   the camera unit.

17 *See MMI*, 780 F.3d at 1170. And Ironworks does not dispute this construction. *See* Reply Br. at 3

18 n.1. Instead, Ironworks argues that claims 1 and 73 use the term differently, and that adopting

19 Samsung's construction would render redundant claim 1's inclusion of a separate "memory unit."

20 *See* Resp. Br. at 16. But the Court is unpersuaded that Samsung's recitation of "memory unit 24"

21 as structure would render redundant the claim's requirement of "at least one memory unit for

22 storing said image information": memory unit 24 could conceivably represent the "memory unit

23 for storing said image information." Moreover, the Federal Circuit relied on the specification

24 generally—including column 4:23–31 and the block diagram in Figure 5—to locate corresponding

25 structure for this term. *See MMI*, 780 F.3d at 1168–71 ("The specification explains that the

26 structure of the camera unit 'conforms to the block diagram shown in Fig. 5.'"). Ironworks does

27 not explain why claim 1's recitation of the "memory unit" would alter the Federal Circuit's

28 recitation of structure from the specification.

The Federal Circuit rejected a similar argument in *Laitram Corp. v. Rexnord, Inc.*, 939 F.2d 1533 (Fed. Cir. 1991). There, the plaintiff argued that the court should not include a structural limitation in its interpretation of a means-plus-function term, because doing so would render redundant a dependent claim that recited that limitation. *See id.* at 1538. The Federal Circuit disagreed, finding that the interpretation of the disputed term came from the specification, and not from the dependent claim. *Id.* In turn, the court found that it could include the limitation while avoiding the prohibition against improperly reading limitations into an independent claim from a dependent one. *Id.* The court stressed that the related doctrine of "claim differentiation," which instructs that different claims typically have different meanings, is a "guide, not a rigid rule." *Id.* (quoting *Autogiro Co. of Am. v. United States*, 384 F.2d 391, 404 (Ct. Cl. 1967)). The Court continued:

> Simply stated, the judicially developed guide to claim interpretation known as "claim differentiation" cannot override the statute. A means-plus-function limitation is not made open-ended by the presence of another claim specifically claiming the disclosed structure which underlies the means clause or an equivalent of that structure. If Laitram's argument were adopted, it would provide a convenient way of avoiding the express mandate of section 112(6). We hold that one cannot escape that mandate by merely adding a claim or claims specifically reciting such structure or structures.

Id. As in *Laitram*, adopting the Federal Circuit's identified structure would not run afoul of the claim differentiation doctrine.

Separately, Ironworks notes that Samsung's construction differs from the Federal Circuit's in that Samsung omits the word "unit" after memory. At the claim construction hearing, however, Samsung said it did not object to the inclusion of "unit." Dkt. No. 157 at 25:8–13. The Court finds that there is no principled reason for omitting "unit" and thus agrees with its inclusion.

C. **"means, coupled to said camera unit, for processing an image recorded by said camera unit" ('078 Patent)**

Ironworks's Construction	Samsung's Construction
No construction necessary. If construed:	This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, 6. Function: processing an image recorded by

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Function: processing an image recorded by said camera unit	said camera unit
Structure: data processing unit or processor 4 or microprocessor 23 and equivalents[5]	Structure: a central processor coupled to the camera unit

The Court adopts Samsung's construction.

This disputed term appears in independent claim 36 of the '078 Patent, which is representative of how the term is used in the claim language. *See* JCCS, App. A at 2–3.

Claim 36
36. A portable notebook computer having a housing, comprising:
a camera unit for recording an image of a selected object, and having at least one memory unit for storing an image recorded by said camera unit;
means, coupled to said camera unit, for processing an image recorded by said camera unit, and
means for transmitting an image processed by said processing means to another location using a radio frequency channel;
wherein at least a portion of said camera unit is integrated in one of said housing of said notebook computer and a circuit card.

Ironworks again argues that the Court need not construe this term, and asks the Court to give the term its "plain and ordinary meaning." Reply Br. at 6. Again, Ironworks failed to provide the Court any such "plain and ordinary meaning," or explain why the Court should adopt such a construction.

Unlike terms already discussed by the Court, Ironworks only provided an alternative construction for this term by way of reply. But as Samsung correctly argues, Ironworks waived any alternative construction argument for this term by omitting it in the opening brief. *See* Resp. Br. at 11 (citing *Trans Video Elecs., Ltd. v. Sony Elecs., Inc.*, 278 F.R.D. 505, 509 (N.D. Cal. 2011, *aff'd*, 475 F. App'x 334 (Fed. Cir. 2012)). Even if Ironworks had not waived the argument, the Court would find that Samsung correctly identified the structure corresponding to the agreed-upon function of "processing an image recorded by said camera unit." *See* Resp. Br. at 10–11; *see Williamson*, 792 F.3d at 1352. As Samsung points out, the phrase "coupled to" suggests a

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[5] At the claim construction hearing, Ironworks noted that the inclusion of "or microprocessor 23" in its proposed construction "was an error." *See* Dkt. No. 157 at 39:3–9.

structure outside the camera unit for processing an image recorded by the camera unit. *See* Resp.

Br. at 10–11. Figure 3 and specification lines 3:13–14 and 2:40–41 support that reading of the

claim language. *See id.*

D.   **"at least one memory unit for storing an image recorded by said camera unit"**
        ('078 Patent)

Ironworks's Construction	Samsung's Construction
Plain and ordinary meaning, no construction necessary. If construed: "Memory inside the notebook computer that can store a picture taken by the camera"	No construction necessary. Plain and ordinary meaning.

The Court holds that no construction is necessary, but that the plain and ordinary

meaning does not permit the memory unit to be outside the camera unit.

This term appears in independent claim 36 of the '078 Patent, which is representative of

how the term is used in the claim language. *See* JCCS, App. A at 3.

Claim 36

36. A portable notebook computer having a housing, comprising:
  a camera unit for recording an image of a selected object, and having **at least one memory unit for storing an image recorded by said camera unit**;
  means, coupled to said camera unit, for processing an image recorded by said camera unit, and
  means for transmitting an image processed by said processing means to another location using a radio frequency channel;
  wherein at least a portion of said camera unit is integrated in one of said housing of said notebook computer and a circuit card.

Both parties argue that no construction is necessary, and that the Court can adopt the

term's "plain and ordinary meaning." *See* Op. Br. at 17; Resp. Br. at 9. Neither party, however,

proffers a specific plain and ordinary meaning or submits evidence of what a person of ordinary

skill in the art would understand this term to mean.

At the claim construction hearing, the parties agreed that the Court need only determine

whether the plain and ordinary meaning of this term permits the memory unit to be outside of the

camera unit. Dkt. No. 157 at 32:7–21. To this end, the Court agrees with Samsung that the claim

naturally refers to "at least one memory unit" that is inside the camera unit, lest the phrasing "and

having" be written out of the claim. *See* Resp. Br. at 9 (citing *K-2 Corp. v. Salomon S.A.*, 191

F.3d 1356, 1364 (Fed. Cir. 1999) ("Courts do not rewrite claims; instead, we give effect to the

terms chosen by the patentee.")).

E.   "a voice controlled device comprising" ('239 Patent)

Ironworks's Construction	Samsung's Construction
Plain and ordinary meaning, no construction necessary.	"A voice controlled device including all the means in the remaining claim elements"

The Court holds that no construction is necessary.

This disputed term appears in independent claims 4 and 10 of the '239 Patent. *See* JCCS,

App. A at 5. The preamble of claim 4 is representative of how the term is used.

Claim 4

4. **A voice controlled device comprising**:
    means for storing the telephone numbers to be selected,
    means for storing at least one identifier for each telephone number to be selected,
    means for receiving an identifier given in a voice form,
    means for interpreting the received voice commands,
    means for selecting a telephone number in response to a voice command,
    wherein the identifier comprises a plurality of sub-identifiers, and the voice controlled device comprises means for storing the sub-identifiers, and means for selecting a telephone number in response to a voice command comprising at least two of the plurality of sub-identifiers including the sub-identifier.

Samsung argues that construction of the preamble is necessary "to clarify that the devices

of claims 4 and 10 include the other means recited in those claims." *See* Resp. Br. at 24.

Samsung claims that this preamble language limits the "wherein" clauses of claims 4 and 10, each

of which uses the "voice controlled device" language from the preamble. *Id.* at 24–25

As Samsung notes, preambles limit claims in certain situations. *Id.* "[A] preamble limits

the invention if it recites essential structure or steps, or if it is 'necessary to give life, meaning, and

vitality' to the claim." *Catalina Mktg Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed.

Cir. 2002) (quoting *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999)). Preambles are not limiting, however "where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention." *Id.* (quoting *Rowe v. Dror*, 112 F.3d 473, 478 (Fed. Cir. 1997)).

No construction of this term is necessary. Although Samsung claims that "voice controlled device" appears elsewhere, and thus limits other claims, Samsung's proposed construction of the preamble only seeks to construe "comprising," as meaning "all the means in the remaining claim elements." *See* Resp. Br. at 24–25. But, as a matter of law, the term "comprising" has a well-established meaning as "including but not limited to." *See CIAS, Inc. v. All. Gaming Corp.*, 504 F.3d 1356, 1360 (Fed. Cir. 2007); *Georgia-Pacific Corp. v. U.S. Gypsum Co.*, 195 F.3d 1322, 1327–28 (Fed. Cir. 1999); *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 811 (Fed. Cir. 1999). Because Samsung only seeks construction of "comprising," which has a well-established meaning, the Court need not construe this term.

F.   "means for storing the subidentifiers" ('239 Patent)

Ironworks's Construction	Samsung's Construction
Plain and ordinary meaning, no construction necessary. If construed: Function: storing the sub-identifiers Structure: Memory, such as RAM, and the control circuitry and programming for storing sub-identifiers in the memory, and all equivalents thereof.	This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6. Function: storing the sub-identifiers Structure: voice pattern memory and the control circuitry and programming for storing sub-identifiers in memory executing the algorithms disclosed in cols. 4:19–37, 4:51–54

The Court adopts Samsung's construction, but modifies the structure to reflect both "voice pattern" and "voice-equivalent" memory, and that the algorithm reference should be to 4:19–54.

This term appears in independent claims 4 and 10 of the '239 Patent. *See* JCCS, App. A at 5. Claim 4 is representative of how the term is used in the claim language:

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Claim 4

4. A voice controlled device comprising:
   means for storing the telephone numbers to be selected,
   means for storing at least one identifier for each telephone number to be selected,
   means for receiving an identifier given in a voice form,
   means for interpreting the received voice commands,
   means for selecting a telephone number in response to a voice command,
   wherein the identifier comprises a plurality of sub-identifiers, and the voice controlled device comprises **means for storing the sub-identifiers**, and means for selecting a telephone number in response to a voice command comprising at least two of the plurality of sub-identifiers including the sub-identifier.

The parties' dispute turns on what structure adequately corresponds to the agreed-upon function of "storing the sub-identifiers." *See* Op. Br. at 22. Ironworks argues that Samsung's construction improperly reads additional limitations into the claim, in part by requiring a specific algorithm as structure for the claimed function. *See id.* at 22–23. Ironworks contends that this case falls within the "*Katz* exception," which allows "a standard microprocessor" to serve as "sufficient structure for 'functions [that] can be achieved by any general purpose computer without special programming.'" *Id.* at 23 (quoting *In re Katz Interactive Call Processing Patent Litg. ("Katz")*, 639 F.3d 1303, 1316 (Fed. Cir. 2011)). Ironworks further argues that the claimed "storing" function here can be performed by a general-purpose computer without special programming. *Id.* Separately, Ironworks asserts that Samsung's construction, which requires memory to be "voice pattern memory," conflicts with the specification's disclosure of a means to store contact information via "voice-equivalent memory." *Id.* at 23–25.

Katz "identified a narrow exception to the requirement that an algorithm must be disclosed for a general-purpose computer to satisfy the disclosure requirement." *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1364–65 (Fed. Cir. 2012); *see also Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech.,* 521 F.3d 1328, 1333 (Fed. Cir.2008) (articulating the default rule that "the structure disclosed in the specification be more than simply a general purpose computer or microprocessor"). In *Ergo Licensing, LLC*, the Federal Circuit found that the *Katz* exception applies only in the "rare circumstance[]" where the claimed function "can be achieved by any general purpose computer without special programming." *See id.* (quotation omitted) (concluding

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1   that the function of "controlling the adjusting means" for measuring fluids delivered into a

2   patient's body "requires more than merely plugging in a general-purpose computer"). The Federal

3   Circuit again cabined *Katz* in *EON Corp. IP Holdings LLC v. AT&T Mobility LLC* ("*Eon Corp.*"),

4   785 F.3d 616 (Fed. Cir. 2015), holding that *Katz* applies only where "the claimed function is

5   'coextensive' with a microprocessor itself." *Id.* at 621–22.

6   Both *Katz* and *Eon Corp.* recognized that "'storing' data" is a function co-extensive with a

7   microprocessor. Accordingly, one component of the agreed-upon function here—"storing"—is

8   analogous to the one discussed in *Katz*. But the particular function of storing the *subidentifiers*

9   requires something more than merely "plugging in" a general-purpose computer. *See Ergo*

10 *Licensing, Inc.*, 673 F.3d at 1365. To this end, Samsung points to the flow chart in Figure 2 and

11 the specification at column 4:19–37 and 4:51–54. Those lines of the specification state: "In the

12 phase when the user wishes to *store the identifier* of the telephone number, the voice-control unit

13 2" must be "*set* to a mode in which the voice-control unit *can expect to receive identifiers*." '239

14 Patent, 4:19–24 (noting that "[t]his function mode is described in the following [lines] with

15 reference to the flow chart of FIG. 2"). Changing over to the store-identifier "function mode" is

16 subsequently accomplished either by "*keying the voice-store key* A or through the menu facility."

17 *Id.* at 4:25–28. "The voice-recognition unit" then creates a message "'Pronounce the identifier,'"

18 after which the user pronounces the sub-identifiers, e.g. "William," "Matthew," or "Herbert." *Id.*

19 at 4:28–33. "Each pronounced sub-identifier" is then "*stored into the voice-equivalent memory*."

20 *Id.* at 4:35–36. This step-by-step process articulates a "narrower construction" of the "storing"

21 function sufficient to bring the term outside the *Katz* exception. *See Katz*, 639 F.3d at 1316

22 (holding that "[a]bsent a possible narrower construction of the terms 'processing,' 'receiving,' and

23 'storing,' . . . those functions can be achieved by any general purpose computer without special

24 programming").

25   Several of Ironworks's own assertions show that the function of "storing" subidentifiers is

26 not coextensive with a general-purpose computer or microprocessor. First, Ironworks's

27 construction identifies corresponding structure as "memory. . . *and programming* for storing sub-

28 identifiers in the memory." *See* Op. Br. at 22. Ironworks's assertion that this programming is

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inherent to any computer-implemented function, Reply Br. at 13, is belied by the specification's

specific, narrower construction. Second, Ironworks's own citations to the specification regarding

voice-equivalent memory show that the storing of sub-identifiers requires special consideration of

how those identifiers are input—for instance, either through "keying" or "pronouncing" the

identifier and telephone number. *See* Reply Br. at 14–15. Indeed, the specification at column 4:7–

15 states:

> Also the numerals from zero to nine are advantageously stored into the voice-equivalent memory, wherein the user can store also the telephone number by pronouncing it, wherein the voice-control unit 2 transforms the pronounced telephone number preferably to signals corresponding to the numeral keys and stores the information on the telephone number to the telephone number memory, wherefrom it can be collected when calling. The user can give the telephone number also by keying in the corresponding numerals.

Although the Court agrees with Samsung's proposed structure, it finds that there is no

principled reason for omitting, and thus includes, the language at column 4:38–50 of the

specification.[6]

With respect to "voice-equivalent" and "voice pattern" memory, Ironworks is correct that

the specification indicates that an identifier can be stored in either form of memory. *See* Reply Br.

at 14–15. The specification appears to use the terms interchangeably. *See* '239 Patent, 3:65–4:3

("According to the pronounced command, the voice-recognition means 3 forms an identifier,

which is stored to the *voice pattern memory 4.* Prior art includes several alternative

implementations for voice-recognition means 3 and *voice-equivalent memory 4* and they are

known by an expert in the field."). For that reason, the Court modifies Samsung's structural

construction to include both "voice pattern memory" and "voice-equivalent memory."

G. "means for interpreting the received voice commands" ('239 Patent)

Ironworks's Construction	Samsung's Construction
Plain and ordinary meaning, no construction necessary.	This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, 6.

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[6] At the claim construction hearing, Samsung raised no objection to this modification. Dkt. No. 157 at 65:20–66:15.

	Function: interpreting the received voice commands
If construed:	Structure: Indefinite
Function: interpreting received voice commands	
Structure: Voice control unit, voice recognition circuitry/programming, a controller, RAM, ROM and associated programming, and all equivalents thereof	

The Court adopts Samsung's construction.

This term appears in independent claims 4 and 10 of the '239 Patent. *See* JCCS, App. A at 6. Claim 4 is representative of how the term is used in the claim language:

Claim 4
4. A voice controlled device comprising:
means for storing the telephone numbers to be selected,
means for storing at least one identifier for each telephone number to be selected,
means for receiving an identifier given in a voice form,
means for interpreting the received voice commands,
means for selecting a telephone number in response to a voice command,
wherein the identifier comprises a plurality of sub-identifiers, and the voice controlled device comprises means for storing the sub-identifiers, and means for selecting a telephone number in response to a voice command comprising at least two of the plurality of sub-identifiers including the sub-identifier.

The parties agree that the term is a means-plus-function term, and that the function is "interpreting the received voice commands." Op. Br. at 19; Resp. Br. at 11. The dispute accordingly turns on whether there is sufficient corresponding structure for the term to survive under Section 112. *See* Op. Br. at 19;[7] *Williamson*, 792 F.3d at 1351 (holding that a means-plus-function term is indefinite "if a person of ordinary skill in the art would be unable to recognize the structure in the specification and associate it with the corresponding function in the claim"). Samsung argues that such a structure is lacking because the specification fails to recite an algorithm for the agreed-upon function. *See* Resp. Br. at 12; *see also Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1384 (Fed. Cir. 2011) ("The usage 'algorithm' in computer systems

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[7] Ironworks omits its "plain and ordinary" meaning proposal from the briefs.

1   has broad meaning, 'for it encompasses in essence a series of instructions for the computer to

2   follow' . . . ." (quoting *In re Waldbaum*, 457 F.2d 997, 998 (C.C.P.A. 1972)).

3   According to Ironworks, the associated structure is "voice control unit, voice recognition

4   circuitry/programming, a controller, RAM, ROM and associated programming, and all equivalents

5   thereof." *See* Op. Br. at 19. In support of that structure, Ironworks cites to the specification at (1)

6   column 3:24–30, which purportedly sets forth the elements of a "voice-control unit"

7   corresponding to Figure 1; (2) Figure 3 and column 5:9–25, which Ironworks claims describes the

8   "voice recognition circuitry/programming;" and (3) column 3:65–4:6, which purportedly describes

9   how voice recognition was well known in the prior art. *Id.* at 20–21. Ironworks also refers the

10   Court to a declaration from its expert, George Valliath, in support of its argument that

11   "interpreting voice commands were [sic] already well known in the art." *Id.* at 21–22; *see* Dkt.

12   No. 145-8 ("Valliath Decl.").

13   The Court finds Ironworks's arguments unpersuasive. To begin, Ironworks cites no

14   authority to rebut the requirement that the specification must present an algorithm as a name for

15   structure of the claimed function. *See Aristocrat Techs. Austl. Pty Ltd.*, 521 F.3d at 1334; *Triton*

16   *Tech of Tex., LLC v. Nintendo of Am., Inc.*, 753 F.3d 1375, 1378 (Fed. Cir. 2014) ("Failure to

17   disclose the corresponding algorithm for a computer-implemented means-plus-function term

18   renders the claim indefinite."). Ironworks does not identify a "step-by-step procedure" for the

19   function of "interpreting the received voice commands." And the lines of the specification to

20   which Ironworks refers make clear that a "voice-recognition means" is but one component of a

21   broader "voice-control" unit. *See* '239 Patent, 3:26–30 ("*A voice-control unit 2 comprises*

22   advantageously *a voice-recognition means 3*, a voice pattern memory 4, a controller unit 5, read-

23   only memory 6, random access memory 7, speech synthesizer 8 and a[n] interface 9."). Figure 1

24   accordingly shows a "SPEECH RECOGN." box "3" that is located within the voice control unit

25   box, "2." And while column 5:9–25 could set forth a sufficiently specific step-by-step procedure

26   for the operation of the voice-control unit, Ironworks expressly disclaims that the "voice control

27   unit" is corresponding structure for the "means for interpreting the received voice commands."

28   Reply Br. at 7 ("First, the proposed structure is not limited to the 'voice control unit.'").

1   Ironworks's arguments regarding the prior art likewise miss the mark. Even if voice

2   recognition technology was well-known from the prior art, that does not mean an artisan of

3   ordinary skill would have recognized an algorithm as structure from the specification. Rejecting

4   an analogous argument in *Triton Tech*, the Federal Circuit explained:

5

6   > The fact that various numerical integration algorithms may have
     > been known to one of ordinary skill in the art does not rescue the

7   > claims. A bare statement that known techniques or methods can be
     > used does not disclose structure. The district court correctly

8   > recognized that although a person of skill in the art might be able to
     > choose an appropriate numerical integration algorithm and program
     > it onto a microprocessor, the patent discloses no algorithm at all.'

9

10   753 F.3d at 1379 (quotations and citations omitted). Ironworks admits in its reply that its expert

11   entirely skips over the fundamental inquiry of whether there is an algorithm for structure. *See*

12   Reply Br. at 9 ("Valliath does not use the word 'algorithm' because Samsung never before raised

13   that specific argument."). Indeed, Valliath speaks primarily to whether the "the means for

14   interpreting voice commands was already well known in the art" at the time of the invention. *See*

15   Valliath Decl. ¶¶ 21–24. Valliath's identification of structure suffers from the same flaws as

16   Ironworks's construction: Valliath relies on identical lines from the specification. *See id.* ¶¶ 28–

17   29 ("In the specific context of words used in the '239 patent and its Figures, one of ordinary skill

18   in the art would have understood that the '239 patent discloses a structure of the voice control unit,

19   voice recognition circuitry, a controller, RAM, ROM and associated programming, (and

20   equivalents) [for interpreting the received voice commands].").

21   Although Ironworks omits the argument from its opening brief, it asserts in its reply that

22   the specification does disclose an algorithm. *See* Reply Br. at 9 (citing '239 Patent, 5:9–25; 6:1–

23   57). Even if the Court were to consider this argument, it fails. As discussed, column 5:9–25 sets

24   forth a step-by-step process corresponding to the "voice control unit 2." So too with column 6:1–

25   57. These lines describe how the "voice-control unit 2 defines probability to all the sub-identifier

26   compositions," and reaches the "final result of the [voice] recognition." '239 patent, 6:8–11.

27   These lines likely adequately describe structure corresponding to the "voice control unit 2." But

28   by Ironworks's own admission, the "voice control unit" is not equivalent to the "means for

23

interpreting the received voice commands." While Ironworks asserts that algorithms can be

designed to accomplish more than one function, *see* Reply Br. at 10, the lines cited by Ironworks

are entirely silent as to the "voice-recognition means 3," or the term at issue here: "a means for

interpreting the received voice commands." As a result, the Court finds that the term is indefinite

under Section 112.

H. **"means for selecting a telephone number in response to a voice command comprising at least two of the plurality of sub-identifiers including the sub-identifier" / "means for selecting a telephone number in response to a voice command comprising a combination of several sub-identifiers" ('239 Patent)**

Ironworks's Construction	Samsung's Construction
Plain and ordinary meaning, no construction necessary. If construed: Function: Selecting a telephone number in response to a voice command comprising at least two of the plurality of sub-identifiers / a combination of several sub-identifiers. Structure: Voice control unit, voice recognition circuitry/programming, a controller, RAM, ROM and associated programming, and all equivalents thereof.	Function: selecting a telephone number in response to a voice command comprising at least two of the plurality of sub-identifiers including the sub-identifier in which: (i) the sub-identifiers need not be pronounced in the voice command in the order they appear in the identifier; (ii) the voice command may include fewer than all of the sub-identifiers in the identifier; and (iii) additional words that do not match any of the stored sub-identifiers may be pronounced in the voice command, but are ignored selecting a telephone number in response to a voice command comprising a combination of several sub-identifiers in which: (i) the sub-identifiers need not be pronounced in the voice command in the order they appear in the identifier; (ii) the voice command may include fewer than all of the sub-identifiers in the identifier; and (iii) additional words that do not match any of the stored sub-identifiers may be pronounced in the voice command, but are ignored Structure: voice control unit, voice recognition circuitry/programming, a controller, RAM, ROM, executing the algorithm disclosed in cols. 4:55–5:22, 6:7–11, or 6:40–57

The Court adopts Ironworks's identification of the function and Samsung's

identification of the structure.

The first term appears in independent claim 4 of the '239 Patent, and the second term

appears in independent claim 10 of the '239 Patent. *See* JCCS, App. A. at 6–8. Claim 4 is

representative of how the terms are used in the claim language:

Claim 4

4. A voice controlled device comprising:
  means for storing the telephone numbers to be selected,
  means for storing at least one identifier for each telephone number to be selected,
  means for receiving an identifier given in a voice form,
  means for interpreting the received voice commands,
  means for selecting a telephone number in response to a voice command,
  wherein the identifier comprises a plurality of sub-identifiers, and the voice controlled device comprises means for storing the sub-identifiers, and **means for selecting a telephone number in response to a voice command comprising at least two of the plurality of sub-identifiers including the sub-identifier**.

The parties dispute both the claimed function and its corresponding structure. Ironworks's functional construction parallels the language of the term itself—i.e. "selecting a telephone number in response to a voice command comprising at least two of the plurality of sub-identifiers / a combination of several subidentifiers." *See* Op. Br. at 24. Ironworks argues that Samsung's identification of function improperly imports into the claim embodiments referenced during reexamination of this patent. *See* Op. Br. at 25–26. As for the corresponding structure, Ironworks identifies the same structure that it identified for the above-discussed term "means for interpreting the received voice commands." *Id.* at 27. Ironworks cites the same lines of the specification— Figure 1 and column 3:24–30—as showing structure for this term. *Id.* at 27. And Ironworks argues that an algorithm is not required because "the '239 patent specifically discloses a structure that is not limited to a general purpose computer or microprocessor." *Id.*

In support of its construction of function, Samsung relies primarily on the doctrine of prosecution disclaimer. Specifically, Samsung argues that MobileMedia—the entity that assigned the patent to Ironworks after patent prosecution was complete—repeatedly asserted that the claimed means of performing the function of "selecting a telephone number in response to a voice command" was limited to the "three defining characteristics" that its construction sets forth: that "(1) the sub-identifiers need not be pronounced in the voice command in the order they appear in the identifier; (2) the voice command may include fewer than all of the sub-identifiers in the

1   identifier; and (3) additional words that do not match any of the stored sub-identifiers may be

2   pronounced in the voice command, but are ignored." *See* Resp. Br. at 17–18. Samsung contends

3   as to structure that an algorithm is required, and that such an algorithm is stated by "two iterative

4   probability-based algorithms at 4:55–5:22, 6:7–11 and 6:40–57." *Id.* at 19.

5   Turning first to function, the Court is not persuaded by Samsung's prosecution disclaimer

6   arguments. The statements upon which Samsung relies for its functional limitations recite "three

7   advantages not found in the prior art." *See* Dkt. No. 151-5 at 27–28. This does not rise to the

8   level of disavowal required to evoke the doctrine. *See, e.g.*, *Thorner*, 669 F.3d at 1366. And

9   although Samsung might be correct that the Federal Circuit does not require "explicit redefinition

10 or disavowal," it typically relies on clear guidance in the specification or prosecution history

11 before reading limitations into claims. *See Trustees of Columbia Univ. in City of N.Y. v. Symantec*

12 *Corp.*, 811 F.3d 1359, 1363 (Fed. Cir. 2016); *Aventis Pharma S.A. v. Hospira, Inc.*, 675 F.3d

13 1324, 1330 (Fed. Cir. 2012) (requiring "clear limiting descriptions of the invention in the

14 specification or prosecution history"); *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314 (Fed.

15 Cir. 2003) ("But where the patentee has unequivocally disavowed a certain meaning to obtain his

16 patent, the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the

17 claim congruent with the scope of the surrender."). Samsung here cites no such clear guidance to

18 support reading in the three specific limitations included in its functional construction.

19 Samsung also points to a statement of MobileMedia that the "sub-identifiers must be stored

20 in the device so as to be usable separately in the selection of the associated telephone number."

21 *See* Resp. Br. at 18. But Samsung's three functional limitations are silent as to storage. Nor does

22 Ironworks's construction speak to how sub-identifiers are stored. Samsung thus has not shown

23 that Ironworks is estopped from advocating this functional interpretation, and the Court thus

24 adopts Ironworks's broader construction of function.

25 As to structure, Section 112 requires an algorithm because the claimed function is not co-

26 extensive with a general-purpose computer or microprocessor. *See Ergo Licensing,* 673 F.3d at

27 1364–65. In its reply, Ironworks only disputes that an algorithm is required—it does not expressly

28 respond to Samsung's identification of an algorithm in columns 4:55–5:22, 6:7–11 and 6:40–57.

1 *See* Reply Br. at 11–12. The lines of the specification cited by Samsung provide a step-by-step

2 process for a "means for selecting a telephone number in response to a voice command

3 comprising. . ." That is corresponding structure sufficient under *Aristrocrat Techs.* and

4 *Williamson.*[8]

5 ## IV. CONCLUSION

6 The Court **CONSTRUES** the disputed terms as follows:

Patent	Claim Term	Construction
'078	"camera unit"	"camera arrangement comprising a camera, optics, microprocessor and memory, battery, and interface to external systems constituting an individual component of a whole personal communication device or whole portable mobile cellular phone"
'078	"means for processing and for storing at least a portion of said image information obtained by said camera unit for later recall and processing"	Function: processing and storing at least a portion of said image information obtained by said camera unit for later recall and processing Structure: microprocessor (23) and memory unit (24) within the camera unit
'078	"means, coupled to said camera unit, for processing an image recorded by said camera unit"	Function: processing an image recorded by said camera unit Structure: a central processor coupled to the camera unit
'078	"at least one memory unit for storing an image recorded by said camera unit"	No construction necessary, but the plain and ordinary meaning does not permit the memory to be outside the camera unit
'239	"a voice controlled device comprising"	No construction necessary

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[8] Even if an algorithm were not required, it is not clear how the "voice control unit, voice recognition circuitry/programming, a controller, RAM, ROM and associated programming, and all equivalents thereof" adequately describes corresponding structure for this claimed function. That is especially so considering (1) Ironworks cites this same exact structure as performing the above-discussed "means for interpreting the received voice commands;" and (2) Ironworks relies on virtually identical lines from the specification for its structural construction of that term, *see, e.g.*, '239 Patent, 3:24–30.

'239	"means for storing the subidentifiers"	<u>Function</u>: storing the sub-identifiers <u>Structure</u>: voice pattern and voice-equivalent memory, and the control circuitry and programming for storing subidentifiers in memory executing the algorithms disclosed in cols. 4:19–54
'239	"means for interpreting the received voice commands"	<u>Function</u>: interpreting the received voice commands <u>Structure</u>: Indefinite
'239	"means for selecting a telephone number in response to a voice command comprising at least two of the plurality of sub-identifiers including the sub-identifier" / "means for selecting a telephone number in response to a voice command comprising a combination of several sub-identifiers"	<u>Function</u>: Selecting a telephone number in response to a voice command comprising at least two of the plurality of sub-identifiers / a combination of several sub-identifiers. <u>Structure</u>: voice control unit, voice recognition circuitry/programming, a controller, RAM, ROM, executing the algorithm disclosed in cols. 4:55–5:22, 6:7–11, or 6:40–57

In addition, the Court **SETS** a further case management conference ("CMC") for Wednesday November 14, 2018 at 2:00 p.m. The Court **DIRECTS** the parties to consult this Court's order granting the parties' joint motion to stay discovery, which sets forth deadlines that are triggered by this claim construction order. *See* Dkt. No. 165. The Court also **DIRECTS** the parties to meet and confer before the CMC to discuss a proposed case schedule through trial and to submit a joint CMC statement by Wednesday November 7.

IT IS SO ORDERED.

Dated: 10/26/2018

HAYWOOD S. GILLIAM, JR.
United States District Judge